On page 16, line 27, please delete "Figure 10 illustrates" and insert in place thereof --Figures 10(1) and 10(2) illustrate--.

On page 17, line 1, please delete "Figure 12 is a flow diagram" and insert in place thereof --Figures 12(1), 12(2), 12(3), 12(4), and 12(5) are flow diagrams--.

On page 18, line 26, please delete "Figure 12 is a flow diagram" and insert in place thereof --Figures 12(1), 12 (2), 12(3), 12(4), and 12(5) are flow diagrams--.

IN THE CLAIMS

Please cancel claims 5-15.

Please amend the claims as follows:

1.   (AMENDED) A method of generating a configuration for a system [configuring a system] comprising the steps of:

defining in said computer system an element model consisting of elements used to configure said system and structural relationships between said elements in said model;

creating in [generating by] said computer system a plurality of components of said system that are instances of one or more elements of said model [a system configuration] in response to [based on] configuration requests [and said element model; and].

[displaying by said computer system a graphical representation of said system configuration and said structural relationships between said elements of said system configuration.]

2.   (UNCHANGED) The method of claim 1 such that said configuration requests are element requests, resource requests, and needs identifications.

3.   (UNCHANGED) The method of claim 1 including the step of generating by said computer system a Bill of Materials report containing a part number and description for each component and spare part in said system configuration, resource totals, failed requests, and failed optional requests.

4.   (UNCHANGED) The method of claim 1 further including the steps of:

bundling by said computer system said elements of said system configuration into product groupings; and

generating a price quotation for said system configuration.

5   16.   (NEW) The method of claim 1 further comprising the steps of:

identifying one or more of said plurality of components that can satisfy constraints of said plurality of components;

creating a second plurality of components to satisfy constraints if said constraints cannot be satisfied by said one or more of said plurality of components.

17. (NEW) An article of manufacturing comprising:

a computer usable medium having computer readable program code embodied therein for generating a configuration for a system, said system configuration specifying a plurality of components that comprise said system comprising:

computer readable program code configured to cause a computer to receive a configuration request;

computer readable program code configured to cause a computer to create an instance of a component in said system configuration in response to said configuration request;

computer readable program code configured to cause a computer to satisfy a plurality of constraints of said component.

18. (NEW) The article of manufacture of claim 17 wherein said configuration request is a request for a component.

19. (NEW) The article of manufacture of claim 17 wherein said configuration request is a request that identifies a need in said system.

20. (NEW) The article of manufacture of claim 17 wherein said configuration request is a request for a resource for said system.

21. (NEW) The article of manufacture of claim 17 further comprising:

computer readable program code configured to cause a computer to define a model that includes a definition for each of a plurality of

components selectable for inclusion in said system configuration and constraints on said plurality of components.

22. (NEW) The article of manufacture of claim 21 wherein said computer readable code configured to cause a computer to create an instance of a component further comprises:

computer readable program code configured to cause a computer to examine said model to select said component using said component's definition in said model;

computer readable program code configured to cause a computer to create an instance of said component in said system configuration using said component's definition in said model.

23. (NEW) The article of manufacture of claim 21 wherein said computer readable code configured to cause a computer to satisfy said plurality of constraints of said component further comprises:

computer readable program code configured to cause a computer to identify said plurality of constraints of said component by examining said model;

computer readable program code configured to cause a computer to identify one or more components of said system configuration satisfy said plurality of constraints;

computer readable program code configured to cause a computer to create a new component in said system configuration to satisfy said plurality

of constraints if said system configuration cannot satisfy said plurality of constraints.

24. (NEW) An article of manufacturing comprising:

a computer usable medium having computer readable program code embodied therein for satisfying a constraint in a system configuration comprising:

computer readable program code configured to cause a computer to identify a component of said system configuration having a constraint;

computer readable program code configured to cause a computer to determine whether said system configuration can satisfy said constraint;

creating a new component in said system configuration to satisfy said constraint if said system configuration cannot satisfy said constraint.

25. (NEW) The article of manufacture of claim 24 wherein said computer readable code configured to cause a computer to identify a component of said system configuration having a constraint further comprises:

computer readable program code configured to cause a computer to define a model that includes definitions for a plurality of components selectable for inclusion in said system configuration and constraints on said plurality of components;

computer readable program code configured to cause a computer to examine said model to determine whether said constraints on said plurality of components includes said constraint.

26. (NEW) The article of manufacture of claim 24 wherein said computer readable code configured to cause a computer to determine whether said system configuration can satisfy said constraint further comprises:

computer readable program code configured to cause a computer to examine said system configuration to determine whether another component of said system configuration is available to satisfy said constraint.

27. (NEW) The article of manufacture of claim 26 wherein said computer readable code configured to cause a computer to examine said system configuration to determine whether another component of said system configuration is available to satisfy said constraint further comprises:

computer readable program code configured to cause a computer to identify a destination component of said system configuration having available ports;

computer readable program code configured to cause a computer to determine whether one of said available ports is compatible with a port of said component;

computer readable program code configured to cause a computer to connect said one of said available ports with said port of said component if said compatibility exists.

28. (NEW) The article of manufacture of claim 27 wherein said computer readable code configured to cause a computer determine whether one of said available ports is compatible with a port of said component further comprises:

computer readable program code configured to cause a computer to determine whether the physical type and logical type of said one of said available ports is compatible with said port of said component.

29. (NEW) The article of manufacture of claim 27 wherein said computer readable code configured to cause a computer determine whether one of said available ports is compatible with a port of said component further comprises:

computer readable program code configured to cause a computer to determine whether a transfer path exists between said one of said available ports and said port of said component.